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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,960	05/04/2005	Wen Zhao	PAT 799W-2	8081

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EXAMINER

LY, NGHI H

ART UNIT	PAPER NUMBER
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2617

NOTIFICATION DATE	DELIVERY MODE
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06/05/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/533,960	Applicant(s) ZHAO ET AL.	
	Examiner NGHI H. LY	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10 and 12-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10 and 12-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/24/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 2-6, 8-10 and 12-27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. US 11928848 (Zhao et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because they both teach similar methods and apparatus for maintaining a wireless data connection. Further, the claims of the instant application are generic to all that is recited in the claims of the copending application (see previous double patenting rejection).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2-6, 9, 10, 12-16, 18 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Virtanen (US 6,249,681) in view of Capurka (US 5,748,620).

Regarding claims 12 and 21, Virtanen teaches a method of automatically re-establishing a data connection on a wireless data network (see Title and Abstract), comprising: automatically transmitting a connection request if the previously established data connection is determined to be lost (see column 1, lines 59-67, column 4, lines 44-67, column 5, lines 1-15 and column 12, line 3 to column 13, line 8, see "request"), and re-establishing the previously established data connection if the transmitted connection request is accepted by the wireless data network (see column 1, lines 34-40, see "an

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*ongoing call... is broken while the call is in progress, the call must be **re-established** in order for the call to be completed", and it reads on Applicant's "previously established").*

Virtanen does not specifically disclose determining, at minimum fixed time intervals determined by a service check timer, the status of a previously established data connection.

Capurka teaches determining, at minimum fixed time intervals determined by a service check timer, the status of a previously established data connection (see Abstract, column 9, lines 55-63 and column 10, lines 51-56, see "determined" and "previous communication").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Capurka into the system of Virtanen in order to determine whether the communication was received within a predetermined period of time after a previous communication involving the communication device (see Capurka, Abstract).

Regarding claims 2 and 22, Virtanen further teaches the wireless data network is a CDMA2000 network (see column 6, lines 52-55, column 10, lines 5-10 and column 13, line 60 to column 14, line 21).

Regarding claim 3, Virtanen further teaches determining that no data connection is previously established includes receiving a refusal of service message from the wireless data network (see Abstract and column 4, lines 44-67).

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Regarding claim 4, Virtanen further teaches the refusal of service message is one of Retry Order, Reorder Order and a Release Order (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 5, Virtanen further teaches further including initializing a back off timer on receipt of the refusal of service message (see Abstract, column 2, line 36 to column 3, line 9, column 4, lines 21-67, column 8, lines 19-63 and column 10, lines 23-62).

Regarding claim 6, Virtanen further teaches the refusal of service message is an Intercept Message (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 9, Virtanen further teaches initializing the back of timer is based on a retry delay specified by the Retry Order (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 10, Virtanen further teaches the back off timer is initialized to a time greater than or equal to the retry delay (see Abstract, column 2, line 36 to column 3, line 9, column 4, lines 21-67, column 8, lines 19-63 and column 10, lines 23-62).

Regarding claim 13, Virtanen further teaches determining the status of the previously established data connection is preceded by initializing the service check timer (see Abstract, column 2, line 36 to column 3, line 9, column 4, lines 21-67, column 8, lines 19-63 and column 10, lines 23-62).

Regarding claim 14, Virtanen further teaches the step of automatically transmitting the connection request is performed upon expiry of a back off timer (see

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Abstract, column 2, line 36 to column 3, line 9, column 4, lines 21-67, column 8, lines 19-63 and column 10, lines 23-62).

Regarding claim 15, Virtanen further teaches the back off timer is initialized to a value based on a retry delay determined in response to a refusal of service message (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 16, Virtanen further teaches determining the status of the previously established data connection includes comparing assigned network resources to default values (see column 42, lines 21-67).

Regarding claim 18 and 25, Virtanen further teaches a step of forcing premature expiry of the service check timer upon receipt of a Release Order (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 23, Virtanen further teaches the connection manager includes means to reset the back off timer in response to the receipt of one of a Retry Order, Reorder Order and a Release Order (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 24, Virtanen further teaches the connection manager includes an accumulator for tracking consecutive rejections of service, and means to reset the back off timer in accordance with the number of consecutive rejections (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 26, Virtanen further teaches the means to reset the back off timer includes means to reset the back off timer such that the back off time is greater

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than, or equal to, a retry delay determined in response to a Retry Order or a Release Order (see column 2, lines 46-53 and column 4, lines 21-67).

Regarding claim 27, Virtanen further teaches the connection request is automatically transmitted upon detection of a new wireless data network (see Abstract).

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Virtanen (US 6,249,681) in view of Capurka (US 5,748,620) and further in view of Marry et al (US 4,827,507).

Regarding claim 7, the combination of Virtanen and Capurka teaches claims 12 and 21. The combination of Virtanen and Capurka does not specifically disclose initializing the back off timer is based on a random seed.

Marry teaches initializing the back off timer is based on a random seed (see column 12, lines 1-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Marry into the system of Virtanen and Capurka in order to protect the exchange of keys and synchronization from interruptions in the communication channel (see Marry, column 2, lines 24-26).

Regarding claim 8, Virtanen further teaches the back off timer is initialized to a time greater than or equal to any back off timer time calculated after a last previously established data connection (see column 4, lines 37-51).

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7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Virtanen (US 6,249,681) and Capurka (US 5,748,620).

Regarding claim 17, the combination of Virtanen and Capurka teaches claim 16 except that the step of comparing includes determining that no data connection is established when an assigned Internet Protocol address is set to 0.0.0.0.0. However, such Internet Protocol address is set to 0.0.0.0.0. would have been obvious since the particular Internet Protocol address could have been determined by the inventor's choice e.g., use an Internet Protocol address which can improve reconnection attempts in the communication network.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Virtanen (US 6,249,681) in view of Capurka (US 5,748,620) and further in view of Official notice.

Regarding claim 19, the combination of Virtanen and Capurka n teaches claim 18 except that the Release Order is a Point-to-point-protocol termination request. However, the Examiner takes Office notice that such feature as recited in the claim is very well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Virtanen and Capurka for providing a method as claimed, for obtaining reconnection in communication network.

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9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Virtanen (US 6,249,681) in view of Capurka (US 5,748,620) and further in view of Hunzinger (US 2002/0082032A1).

Regarding claim 20, the combination of Virtanen and Capurka teaches claim 12. The combination of Virtanen and Capurka does not specifically disclose the connection request is an Origination Message.

Hunzinger (US 2002/0082032A1) teaches the connection request is an Origination Message (see [0007]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Hunzinger into the system of Virtanen and Capurka in order to allow the infrastructure to adapt access parameter to increase or decrease the likelihood of successful access (see Hunzinger, Abstract).

Response to Arguments

10. Applicant's arguments with respect to claims 2-10 and 12-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571)272-7911. The examiner can normally be reached on 9:30am-8:00pm Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly

/Nghi H. Ly/
Primary Examiner, Art Unit 2617